

THE BIRDS OF THE CHOCTAWHATCHEE BAY REGION OF
FLORIDA

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INTRODUCTION

Peninsular Florida has so long been a favorite field for ornithological activity that its avifauna is by now fairly well known. But the northwestern part of the State, stretching along the shore of the Gulf of Mexico, has for some reason received little or no attention, although in more recent years a little work has been done in the coast region of the adjoining State of Alabama. Believing that this section of Florida would repay investigation from an ornithological standpoint, the senior author in the fall of 1902 made a proposition to the authorities of the Carnegie Museum involving a six months' collecting trip to the region of Choctawhatchee Bay. This proposition having been duly accepted, he went to Pensacola, Florida, by rail, and thence by schooner to the Bay. Portland had provisionally been selected as headquarters, but upon his arrival there it seemed best to locate in Whitfield, a village about a mile to the south of the other, at the head of Alagua Bayou. He arrived here the second week in November, 1902, and began operations on November 15, continuing without interruption until May 14, 1903. He was joined here on March 21, 1903, by the junior author, who remained until May 6, his stay thus covering the height of the spring migration. During this period of six months thirteen hundred and sixty-four specimens of birds were collected and preserved, many of them in excellent series. The present paper is based on a study of this collection, and on the field notes of both authors made at the time. The delay in its preparation and appearance is to be regretted, and may be explained, if not excused, as being due to pressure of other and more important work, but now that we are looking forward to the early publication of an authoritative distributional list of the birds of Florida by Mr. Arthur H. Howell, it seems desirable to put the facts on record without further delay. Scattered references to some of our observations have already appeared in various places, nor have such always been entirely accurate.

DESCRIPTION OF THE REGION

The coastal plain of western Florida, fronting on the Gulf of Mexico, is low and flat; any elevation of twenty feet is a "hill" high enough to excite remark. The slope is imperceptible, and the water of the streams sluggish. The soil is sandy, and mostly unfit for cultivation. The prevailing tree is the long-leaf pine (*Pinus palustris*), which

covers the whole country, except in the immediate vicinity of water, forming an open forest of a monotonous character. To one who has been accustomed to a varied landscape and flora the sameness of such a forest, stretching away interminably in every direction, and appearing to close up like a wall at a little distance, is somewhat confusing, and a good sense of direction is needed to find one's way through it. The bird life of this pine forest is limited to a few species which are suited to such a habitat: the Sparrow Hawk, Mourning Dove, Red-cockaded Woodpecker, Bachman's Sparrow, Summer Tanager, Yellow-throated Warbler, Pine Warbler, Brown-headed Nuthatch, and Bluebird are the most characteristic. The ground beneath is mostly covered with bunchy grasses, with here and there areas of scrub palmetto and sometimes low bushes—good covert for such species as the Towhee, House Wren, Brown Thrasher, etc., but in general birds are not abundant here, at least in the nesting season.

The course of every stream, no matter how small, is marked by a fringe of hardwood trees and shrubbery, visible for a long distance through the pines, which in some places have been much thinned out by lumbering. Among the trees composing this alluvial forest are the magnolia, live oak, tupelo, maple, second-growth cypress, etc. A rich forest of this kind grows along the Alaqua River, which we explored from its mouth at Whitfield to Portland, about a mile above, and along a couple of short creeks emptying into the bayou in the immediate vicinity. The water in these creeks is so deep, even near their heads, that we had no difficulty in ascending them in the small boat from which much of our shooting was done. These shady woods, interspersed by stagnant pools, and with an undergrowth of bushes and vines and high ferns, are favorite resorts for such birds as the Prothonotary, Swainson's, Parula, and Hooded Warblers, Cardinal, Acadian Flycatcher, Pileated Woodpecker, etc., with a variety of other kinds during the season of migration. Where this woodland gives way to the pines there are frequent areas of dense thicket, which afford congenial haunts to the Catbird, Blue-gray Gnatcatcher, Carolina Chickadee, etc. Cultivated areas had their quota of the Mockingbird, Bobwhite, Meadowlark, Orchard Oriole, and others.

To the east of the mouth of the Alaqua River there is a marsh several acres in extent, across the middle of which, at the time of our visit, ran an elevated board-walk, unused and fallen into decay, but still passable. This marsh was not negotiable in any other way, except by paddling around its edge, and for this reason could not be thoroughly explored. American and Least Bitterns, Sora Rail, Long-billed Marsh Wrens, and Florida Yellow-throats were common here.

but were all difficult to obtain. We explored also a cane-brake on the western side of the bayou, but found it destitute of bird life.

On May 4 and 5 we visited Horseshoe Bayou, on the south side of Choctawhatchee Bay, in a schooner chartered for the purpose, and thence crossed over to the Gulf Coast proper. Horseshoe Bayou is situated in Longitude $86^{\circ} 20'$ West, not far from the little town of Santa Rosa, in a desolate region surrounded by sand-dunes, covered with bushes and scrub. Continuing southward, we came to a tract of sand-hills rising fifty or sixty feet above the general level, and mounting one of these the Gulf of Mexico presently came into view, although a considerable stretch of sand-dunes still intervened. Crossing these, we found ourselves on a gently sloping beach averaging less than a hundred feet in width, faced by a bluff of varying height, and all of the purest white sand, dazzling white in the sunshine, contrasting finely with the waters of the Gulf, which were of the clearest green, the whole forming a beautiful picture. Here we found a few shore-birds, including the Cuban Snowy Plover, and in a marshy place at Horseshoe Bayou encountered a flock of Boat-tailed Grackles, the only ones seen during the trip. It is a matter of regret that our time here was so limited.

REMARKS ON MIGRATION

One hundred and sixty kinds of birds were recorded during the period covered by our stay. Of this total fifty-three species, or one-third of the list, come under the class of summer residents and transient visitants. On going over these one is struck not only by the brevity of the list itself, but even more by the many species which were recorded as rare and seen on only a few occasions. If we were disappointed in the results of the work during the winter months, having failed to find so many kinds that we had reason to expect, we were doubly disappointed with the spring migration. There were a few kinds that arrived and became common in due course, but the anxiously awaited "bird wave" never materialized. The riparian woodland looked like an ideal place for birds, but the birds were not there, aside from a few common kinds. The Swainson's Warbler was in fact the only "desirable" species which actually came up to expectations. What we failed to find was of more significance than what we did find. The late Prof. Wells W. Cooke used our experience as a text whereupon to hang an important discovery in bird migration. We quote the following from his paper on the subject (Bull. U. S. Depart. Agric., No. 185, 1915, p. 33):

"During the spring migration of 1903 two experienced ornithologists spent the entire season on the coast of northwestern Florida, visiting every sort of bird haunt. They were eminently successful in the long list of species identified, but their enumeration is still more remarkable for what it does not contain. About 25 species of the smaller land birds of the Eastern States were not seen, including a dozen common species. Among these latter were the chat, the redstart, and the indigo bunting, three species abundant throughout the whole region to the northward. The explanation of their absence from the list seems to be that these birds, on crossing the Gulf of Mexico, flew far inland before alighting and thus passed over the observers."

Cooke's explanation is undoubtedly correct, as will readily be seen from a comparison of our list of species observed at Whitfield with that given by Mr. Arthur H. Howell in his "Birds of Alabama." It would be most interesting to learn if the same condition held also for the fall migration, that is, if there are species which do not reach the Gulf Coast at that season, but begin their flight some miles back of it. The general unsuitableness of the pine barrens for the great majority of the species is probably one of the causes for this avoidance of the region. In the case of such Mississippi Valley species as migrate through peninsular Florida, it is quite likely that their route carries them north-westward directly upon leaving it, and so they do not enter the Choctawhatchee Bay region at all.

LIST OF THE SPECIES

[The following list contains 160 named forms.—Ed.]

The sequence and, in general, the nomenclature of the A. O. U. "Check-List" have been followed in the present paper, but an effort has been made to bring the names used down to date, in certain cases where the changes proposed seem to us to be justified. A few additional changes of this nature have been suggested. For all critical matter in the present paper the junior author is responsible, and he has also contributed such of the biographical notes as deal with the species that came under his observation.

HORNED GREBE. *Colymbus auritus*. A common winter resident on Choctawhatchee Bay, where good-sized flocks were seen on November 8. Many birds of this species died during the winter, apparently of starvation. Several were caught alive, being much emaciated, and too weak to fly or dive. Dead individuals were also seen, but owing to crabs, gars, and other scavengers few of those which perished were likely to be noticed. The species was last seen alive on February 11. Six specimens were secured (December 3-10).

PIED-BILLED GREBE. *Podilymbus podiceps*. Like the last a common winter resident, frequenting the shores of the Bay, where it was

found singly or in small parties. April 11 was the latest spring date for it.

LOON. *Gavia immer*. A not uncommon winter resident. Numbers were seen on the bay on November 8, and it was noted almost daily up to April 10, while a single belated bird was seen as late as May 4.

RING-BILLED GULL. *Larus delawarensis*. Rather common on the lower bay on November 8, but none visited the upper bay thereafter, nor the bayous.

LAUGHING GULL. *Larus atricilla*. Two seen on the lower bay on May 4, on our trip to the Horseshoe Bayou, were the only ones observed.

ANHINGA. *Anhinga anhinga*. A single bird was seen on April 9, sailing high in the air over the waters of the bay.

DOUBLE-CRESTED CORMORANT. *Phalacrocorax auritus auritus*. Apparently rare. Two were noted on November 8, and it was seen on an average about twice a month up to March 7, after which no more were observed until May 4, at Horseshoe Bayou.

RED-BREASTED MERGANSER. *Mergus serrator*. A winter resident, somewhat rare. A flock of eight was noted on December 11, a single bird December 23, and a flock of six January 19. Owing to constant persecution from local pot-hunters, what few ducks were seen were extremely shy.

HOODED MERGANSER. *Lophodytes cucullatus*. Rare in winter. A flock of four seen January 15 (one of which was secured), and a single individual on January 17, were the only recorded occurrences.

MALLARD. *Anas platyrhynchos*. A winter resident. A flock of sixteen was noted on December 1, and a few stragglers were seen up to February 6, but none thereafter.

FLORIDA DUCK. *Anas fulvigula fulvigula*. Small flocks of ducks, believed to be of this species, were seen occasionally, from November 10 up to February 19, but unfortunately none were secured.

BLUE-WINGED TEAL. *Querquedula discors*. A small flock was seen on December 3, and two individuals on April 16. A winter resident.

PINTAIL. *Dafila acuta tzitzihoa*. A small flock haunted the bay shore from February 24 up to March 10. The last seen were two on March 27.

WOOD DUCK. *Aix sponsa*. One male bird was flushed near the head of one of the creeks, where it was feeding among the aquatic plants, on April 14.

LESSER SCAUP DUCK. *Marila affinis*. Occurs as a rather rare winter resident. Dates of record are November 18 (a flock of eight), 26, December 3, 10, and May 4 (a party of three at the Horseshoe Bayou). The last is a late date for so far south.

WHITE IBIS. *Guara alba*. Small flocks were seen in flight over the Alaqua River and Bayou on March 17, April 21, 27, and 29. We could find no evidence that the species was breeding in this vicinity, although the dates would suggest that it probably was.

AMERICAN BITTERN. *Botaurus lentiginosus*. The Bittern doubtless occurs as a winter resident, but it was noted only once in the fall, November 24, and but twice in the spring, March 28 and April 22 (a rather late date), on each occasion in the swamp at the mouth of the Alaqua River.

LEAST BITTERN. *Ixobrychus exilis*. This species probably breeds in the marsh at the mouth of the Alaqua River, where one was secured April 7. Another individual was seen at Horseshoe Bayou on May 5.

WARD'S HERON. *Ardea herodias wardi*. A not uncommon resident bird, noted regularly throughout the winter and spring. A nest was found in an immense pine tree, built far out on the end of a limb overhanging the water, about forty feet up, and inaccessible by ordinary means. When visited on March 23 it probably contained eggs, judging from the actions of the parents, which kept hovering around, and on April 16 we could hear the young calling.

LITTLE BLUE HERON. *Florida caerulea*. Probably a summer resident here, but we found no evidences of its breeding. The first was seen on March 21, and a flock of twelve the next day. Occasional small parties and single birds were seen through most of April, and again on May 5, at Horseshoe Bayou. Only one specimen was secured.

GREEN HERON. *Butorides virescens virescens*. Not uncommon as a summer resident, although not actually found breeding. It was first observed on March 19, and thence up to the end of our stay, usually along the creeks. The two males secured are obviously darker and more richly colored below than the five females.

BLACK-CROWNED NIGHT HERON. *Nycticorax nycticorax naevius*. Rare; one was seen on May 13.

KING RAIL. *Rallus elegans elegans*. One was put up in the high marsh grass along the shore of the bayou on March 30, but was not

brought to bag. Its haunts and habits are such that it is probably more common than this single record would indicate. It probably breeds here.

SORA RAIL. *Porzana carolina*. The Sora Rail probably passes the winter here, occasionally at least, since one was seen on December 18, but it was not again recorded until April 20, and then on April 27 and May 4, and lastly on May 7. The remarks on the last species apply to this one also.

COOT. *Fulica americana*. An abundant winter resident, found in flocks of hundreds along the shores of the Bay, where it feeds on the seeds of the rushes growing in the shallows, and often straggling up the bayous and the streams, especially in windy or stormy weather. It was already common on our arrival on November 8, and was seen last (a single bird) on April 28.

AMERICAN WOODCOCK. *Rubicola minor*. A single individual was seen on May 9, which would indicate that the species breeds in this vicinity, as it is known to have young much earlier than this at other points on the Gulf Coast.

WILSON'S SNIPE. *Capella delicata*. A winter resident, apparently of rare occurrence. One was seen on February 9, a party of three February 20, and one April 1.

SEMPALMATED SANDPIPER. *Ereunetes pusillus*. A party of five small sandpipers, identified as this species, passed over Alaqua Bayou on May 11, just out of gunshot, flying northward.

SANDERLING. *Crocethia alba*. A small flock, out of which three individuals were secured, was noted on the Gulf beach May 5, and a single bird was with the flock of Semipalmated Sandpipers referred to as having been seen May 11. The three specimens secured were all females, undergoing the prenuptial molt.

SOLITARY SANDPIPER. *Tringa solitaria solitaria*. A spring transient, for which there are only four records, the first on April 25 and the last on May 11.

SPOTTED SANDPIPER. *Actitis macularia*. A common transient, noted first on April 3, and last seen on May 15.

KILLDEER. *Oxyechus vociferus vociferus*. Rather common for a time (January 19-February 26) on the shores of the outer bay, but not noticed during the breeding season.

CUBAN SNOWY PLOVER. *Charadrius nivosus tenuirostris*. One shot on the Gulf beach on May 5 was our only note for this species, which has already been recorded by Cherrie (*Auk*, XIV, 1897, 402) as com-

mon and breeding on the outer beach of Santa Rosa Island, a few miles away. The specimen is strikingly different from a series of true *nivosus* from the Pacific Coast, the pileum and upper parts being soiled white, and the whole appearance of the bird, as well as its separated range, suggests its specific distinctness from that form. Its light coloration harmonizes well with the glistening white beaches which it inhabits.

BOB-WHITE. *Colinus virginianus virginianus*. An abundant resident, equally common in the cultivated fields and the open pine barrens, but usually taking refuge in the thicker growth along the streams whenever pursued. The farmers complained that the "partridges," as they called them, were in the habit of eating their garden peas. The series secured are typical of *virginianus*, and show no approach toward the race *floridanus* of peninsular Florida.

WILD TURKEY. *Meleagris gallopavo silvestris*. A tolerably common resident species. A flock of about a dozen birds which haunted the vicinity were in the habit of coming into the fields, within sight of the dwellings, to feed. The single specimen secured compares favorably with northern examples.

MOURNING DOVE. *Zenaidura macroura carolinensis*. Common throughout the winter. A few probably breed, since some were noted as late as April 22.

TURKEY BUZZARD. *Cathartes aura septentrionalis*. A common resident; probably breeds.

BLACK VULTURE. *Coragyps urubu*. Common throughout the winter probably breeds.

SWALLOW-TAILED KITE. *Elanoides forficatus forficatus*. Not common, and its exact status here unknown. Four were seen on March 7, flying high in the air, two on March 9, and one on March 18.

MISSISSIPPI KITE. *Ictinia mississippiensis*. The first individual of this species was noted on April 15, and a few at intervals thereafter up to May 15, so that it doubtless breeds here. It was usually observed perched on the top of some tall dead tree, and did not seem particularly shy. Three specimens were secured.

MARSH HAWK. *Circus hudsonius*. One was seen on February 11.

SHARP-SHINNED HAWK. *Accipiter velox*. Occasional through the winter, single individuals having been seen at intervals up to March 12.

COOPER'S HAWK. *Accipiter cooperi*. Only one seen (March 5).

RED-SHOULDERED HAWK. *Buteo lineatus lineatus*.

FLORIDA RED-SHOULDERED HAWK. *Buteo lineatus alleni*. The species was of fairly common and regular occurrence during our stay, and was usually seen in the rich growth along the streams. Of two specimens secured, one is a typical, even an extreme, example of *lineatus*, while the other is better referred to *alleni*. The latter must be the breeding form of the region.

BALD EAGLE. *Haliaeetus leucocephalus leucocephalus*. Not infrequently observed throughout the winter, from December 23 up to as late as May 5, when it was seen at the Horseshoe Bayou. It probably breeds, but no evidence on this point was uncovered.

SPARROW HAWK. *Falco sparverius sparverius*. Rather common during the winter months, and noted regularly from November 17 to March 16. The specimens taken are all typical *sparverius*, and two of the males have the rufous crown-spot reduced to a mere trace.

OSPREY. *Pandion haliaetus carolinensis*. A resident species, but more conspicuous than common. One pair were nesting on Alaqua Bayou, and they remained in its vicinity all winter. On February 20 four were seen, evidently migrating individuals, and a very few others at intervals. A nest was found at Horseshoe Bayou on May 5.

FLORIDA BARRED OWL. *Strix varia alleni*. Five individuals were noted, two of which were secured, between December 22 and March 28.

FLORIDA SCREECH OWL. *Otus asio asio*. A resident species, but far from common. One was shot December 12, in a grove of young pines in the barrens, and another May 5, at dusk, in shrubbery near a stream.

GREAT HORNED OWL. *Bubo virginianus virginianus*. A resident species, noted but once (March 30) on the northern side of the Bay, and again at Horseshoe Bayou on May 4.

YELLOW-BILLED CUCKOO. *Coccyzus americanus*. A common spring migrant; probably breeds. It was noted first on April 20, became common on April 25, and continued so to the end of our trip.

BELTED KINGFISHER. *Ceryle alcyon alcyon*. A winter resident, noted regularly from November 18 to April 29.

SOUTHERN HAIRY WOODPECKER. *Dryobates villosus auduboni*. A rather common resident. The series taken indicate that in this southern race there is a marked tendency toward a division of the red nuchal crescent of the male into two spots.

SOUTHERN DOWNY WOODPECKER. *Dryobates pubescens pubescens*. Like the last a resident species, but more common. The series secured are very uniform in their color and markings—much more so than the northern form.

RED-COCKADED WOODPECKER. *Dryobates borealis*. This is the common woodpecker of the open pine barrens. A nest was found April 1 in a living pine, but whether with eggs or young was not determined. Specimens shot in December and January were in fine fresh plumage, but by the end of March the feathers of the lower parts had become soiled from contact with the tree-trunks. Variation in the amount of black spotting on the outer rectrices is evident in the series.

YELLOW-BELLIED SAPSUCKER. *Sphyrapicus varius varius*. A common winter resident, noted regularly from November 13 to March 30. A pair of young birds taken as late as March 4 were still largely in juvenal dress. Females appear to have more yellowish white on the outer rectrices than males.

PILEATED WOODPECKER. *Phloeotomus pileatus pileatus*. A tolerably common resident, haunting the mixed woodland along the Alaqua River and its tributaries. Four specimens were taken.

RED-HEADED WOODPECKER. *Melanerpes erythrocephalus*. This species was not observed during the winter months, nor indeed until April 15, not becoming common until a month later.

RED-BELLIED WOODPECKER. *Centurus carolinus*. A common resident. This and the last species feed very largely upon mulberries in season, and together with the Summer Tanager, contrive to keep the trees so well stripped that it is scarcely possible for the owners to get any of the ripe fruit for their own use.

FLICKER. *Colaptes auratus auratus*. A common resident. Specimens compare favorably with others from peninsular Florida.

NORTHERN FLICKER. *Colaptes auratus luteus*. A pair of birds shot January 23 come within the range of measurements assigned to this race, which in our opinion rests upon very slender characters indeed, and is scarcely entitled to recognition by name. These individuals were doubtless winter visitants from farther north.

CHUCK-WILL'S WIDOW. *Antrostomus carolinensis*. A tolerably common summer resident, but more often heard than seen, keeping mostly to the drier parts of the woods and thickets, and coming out into more open spots at dusk. Efforts to secure specimens at such times did not bear fruit, owing to the brief duration of twilight in this latitude, and to the difficulty of locating the singing birds even when close. Their call is deceptive in intensity, appearing to come from near by even when the birds are really at some distance. They are more apt to be active and vociferous somewhat earlier on a dark, cloudy evening. When flushed in the daytime they invariably alighted on trees. The first individuals were noted on April 10.

WHIP-POOR-WILL. *Antrostomus vociferus vociferus*. This species appears to be occasional in winter, having been noted twice, November 18 and February 17, and secured on the latter occasion.

NIGHTHAWK. *Chordeiles minor minor*. Common in spring migration. Nighthawks were noted first on April 7, but whether of this form or the next it is impossible to say, as none were secured on that date, or indeed until April 23. The last bird of the present form was shot May 2.

FLORIDA NIGHTHAWK. *Chordeiles minor chapmani*. Two specimens of this, the summer resident form, were taken, on April 24 and 25 respectively. Nighthawks of both forms were fond of alighting on a sandy road where it crossed an open space. Even at this season they were excessively fat.

CHIMNEY SWIFT. *Chaetura pelagica*. First noted in spring migration on April 13, and common by April 20.

RUBY-THROATED HUMMINGBIRD. *Archilochus colubris*. This species was noted on March 10 and 13, which is certainly an early date of arrival, if indeed it does not suggest wintering. It was seen again on April 9 and 23, but seems to be a rare bird here.

SCISSOR-TAILED FLYCATCHER. *Muscivora forficata*. A single bird of this striking-looking species was seen and positively identified on May 15, but not secured. It is of course merely a straggler so far east, although there are several other records from Florida and one from Alabama, and it is rare in Louisiana.

KINGBIRD. *Tyrannus tyrannus*. A common summer resident, whose arrival was recorded on March 28. Specimens taken here are entirely similar to northern examples.

CRESTED FLYCATCHER. *Myiarchus crinitus*. A common transient and presumable summer resident, first seen on April 1. A series of fifteen specimens were secured, which are indistinguishable from northern birds. We are unable, after examination of considerable pertinent material, to verify the characters claimed for the supposed race *boreus* by Mr. Howell (Birds of Alabama, 1924, 187).

PHOEBE. *Sayornis phoebe*. Rather common as a winter resident, from the time our work began until March 17. Specimens taken at this latter date had already lost most of the yellowish bloom below which characterizes the fresh winter plumage.

WOOD PEWEE. *Myiochanes virens*. This is no doubt a summer resident here, as it is in adjacent parts. Its arrival was recorded on April 4, and it was common before the end of the month.

ACADIAN FLYCATCHER. *Empidonax virescens*. Doubtless a summer resident species, and rather common, frequenting the swampy forest along the streams. April 6 was the date of its recorded arrival.

FLORIDA BLUE JAY. *Cyanocitta cristata cristata*. A resident species, very common. Jays from this region average rather darker-colored than those from peninsular Florida, but the latter vary a great deal among themselves. One specimen (No. 11.817), indeed, has the under parts decidedly suffused with purplish blue.

FLORIDA CROW. *Corvus brachyrhynchos pascuus*. A resident species, not very common. We are informed that as a result of a bounty on Crows, paid a few years before, large numbers had been shot and poisoned, which would account for their reduced numbers.

The single specimen secured is a female, which we are unable to distinguish satisfactorily from specimens from peninsular Florida. Mr. Howell has proposed to call the Crows of Alabama by another name, *paulus*, on account of their relatively smaller size, but if the (admittedly scanty) material before us is at all representative we see no need for this innovation.

FISH CROW. *Corvus ossifragus*. A few were seen in November, February, and March, and in April they became rather common, but were very shy.

BOBOLINK. *Dolichonyx oryzivorus*. A spring transient, not common, observed only from May 3 to May 6.

FLORIDA RED-WINGED BLACKBIRD. *Agelaius phoeniceus phoeniceus*. Red-wings of one form or another were common throughout the winter months, and some that were seen at Horseshoe Bayou on May 4 must have been *phoeniceus*. The series of specimens from Whitfield are difficult to place. Some have the stout bill and long wing of the northern form, to which we are compelled to refer them. Others have the wing almost or quite as long as the northern form, but the bill is long and slender, while others still have short wings and a rather short bill. Unfortunately, none are breeding birds.

RED-WINGED BLACKBIRD. *Agelaius phoeniceus predatorius*. Four specimens (December 30-March 23) we would refer to this race with but little hesitation; although their middle wing-coverts are deeper buffy than any of the northern birds, this is probably due to season, while in other respects they agree better with *predatorius*. They were doubtless birds which had come from the north.

SOUTHERN MEADOWLARK. *Sturnella magna argutula*. A common resident, frequenting the more open situations. A nest with five eggs

was found at Horseshoe Bayou on May 5. It was built in the low grass a little back from the wet marsh, and scarcely protected from view, save by its being partially domed over. The song of the Meadowlark here differs decidedly from that one hears in the north; it is weaker, and sounds as if it were cut off before coming to the end.

The *Sturnella* of peninsular Florida differs from the northern bird as said by Mr. Bangs, and is doubtless separable, as he claims. But the series from Whitfield, taken from November 18 to March 19, are certainly very puzzling, presenting as they do different combinations of characters in varying degree. Some are nearly or quite as large as northern birds, while others are as small as the average specimen from peninsular Florida. But the smallest specimens are not always the darkest, nor the largest the lightest colored. There is no assurance, moreover, that the series secured correctly represent the breeding bird of the region, since eggs were not taken here until early in May, while the latest specimen collected is dated March 19. There is an astonishing difference in the condition of specimens taken at the same time, some individuals showing the pure yellow under parts and sharply defined black collar of the breeding dress, while others have these parts and the collar heavily veiled with buffy, as regularly found in winter plumage. It may be a matter of age.

Dr. Chapman (*Bull. Am. Mus. Nat. Hist.*, XIII, 1900, 300) thinks that *argutula*, if recognized at all, should be restricted to the bird of peninsular Florida, but Mr. Ridgway does not accept this conclusion at all, but instead follows Mr. Bangs in using the name for the bird of the Austro-riparian Zone in the eastern United States (except for a part of Texas). The type-locality of *magna* (South Carolina), however, lies within this Zone, and it will therefore be necessary to further limit the assigned range—unless, indeed, South Carolina birds turn out to belong to the southern form, which is denied by Mr. Bangs and by Mr. Arthur T. Wayne.

ORCHARD ORIOLE. *Icterus spurius*. A common summer resident: seen first on April 7, and common on April 9, when it was observed in the scattered bushes in the swamp at the mouth of the Alaqua River. A specimen secured April 16 shows the stage of plumage in which the young male reaches the United States. Three other specimens, April 25 and 28 and May 13, are progressively more worn. All of them have scattering black feathers about the head, and all but one a few chestnut feathers below. No. 13,015 has the central rectrices extensively black—which we regard as an indication of individual precocity. No. 12,995, April 25, a male emerging into the second nuptial plumage.

still has a few greenish feathers about the head, widely greenish-tipped rectrices, and the lower abdomen and tibiae somewhat buffy. No. 12.958, April 21, a male in third (or later) nuptial plumage, shows the pale feather-tipping of the winter dress in process of wearing off, leaving the bird plain black and chestnut in "solid" areas, the rectrices narrowly tipped with buffy, and the remiges edged externally with greenish buffy (very pale).

BALTIMORE ORIOLE. *Icterus galbula*. One was observed on April 16.

FLORIDA GRACKLE. *Quiscalus quiscula quiscula*. This bird may be a resident species here, but it was not recorded until February 24, becoming common a few days later. Ten specimens secured are very uniform in color, the head, throat, and breast in the males varying only from steel blue to violet with slight purple reflections.

BOAT-TAILED GRACKLE. *Megaquiscalus major major*. This species was not detected on the north side of the bay, but at Horseshoe Bayou on the south side a flock of about twenty birds, mostly females, was encountered on May 4, as they were evidently about to go to roost, and two specimens were secured.

AMERICAN GOLDFINCH. *Astragalinus tristis tristis*. A winter resident, apparently rare: two were noted on January 5 and one on January 22.

VESPER SPARROW. *Pooecetes gramineus gramineus*. A common winter resident from November to March 30. In specimens taken in November the rich colors of the freshly acquired winter dress are still evident, although less marked, while the series that follows illustrate beautifully the gradual loss of these colors by wear through the winter months, until by the end of March they have almost entirely vanished, leaving the birds as they appear upon reaching their summer home in the north.

SAVANNAH SPARROW. *Passerculus sandwichensis savanna*. Not uncommon throughout the winter, from November 17 up to March 31.

GRASSHOPPER SPARROW. *Ammodramus savannarum australis*. Noted only during the spring migration, between March 17 and 31, and not at all common. It may winter here, and probably breeds.

HENSLOW'S SPARROW. *Passerherbulus henslowi*. This species appears to be a rather common winter resident, although difficult to collect by reason of the nature of its haunts and its shy and retiring habits. Ten specimens were secured, however, between December 4 and February 9. These are of course in fresh winter plumage, with the feathers of the back and scapulars prominently margined with white, producing

a squamate effect. The attempt to identify the series subspecifically led to results which are at variance with those published by Brewster a few years ago (see *Proc. New England Zool. Club*, V, 1918, 77-79), and which have not been questioned since. This author undertook to separate the Henslow's Sparrow of the Atlantic Coast from that of the interior, describing the former under the name *susurrans*, taking as the type-locality for it Falls Church, Virginia. But after having compared nine birds from Illinois and Wisconsin with an equal number from Washington, D. C., and vicinity, we can find no grounds whatever for separating the respective series as distinct races, for while there is some variation apparent, it is certainly not geographical. At any rate, it is impossible to find any distinctive characters whereby these winter birds can be recognized, or their summer range determined.

Dr. Oberholser (*Ohio Journ. Sci.*, XVII, 1917, 335) has proposed to separate this species generically under the name *Nemospiza*, on account of its stouter bill and shorter outer primary. Although these characters are evident, they do not appear to us to constitute sufficient grounds for keeping this species generically distinct from the Leconte's Sparrow, to which it is certainly very closely related, and with which it agrees in the shape of the rectrices, the proportions of the feet, and the pattern of coloration.

WHITE-THROATED SPARROW. *Zonotrichia albicollis*. Not common as a winter resident, and noted only between December 3 and March 11.

CHIPPING SPARROW. *Spizella passerina passerina*. A winter resident, abundant about the houses and clearings from November 20 to March 28. Of the specimens secured two, shot January 30 and February 6, have the pileum almost solid chestnut, as it is normally later in the season. Two others, dated March 17 and 21, show molt going on around the head and neck.

FIELD SPARROW. *Spizella pusilla pusilla*. A common winter resident from November 10 to March 30.

BACHMAN'S SPARROW. *Peucaea aestivalis bachmani*. A fairly common resident species, haunting the pine barrens. In its habits it is inconspicuous and secretive, preferring to run and hide in the grass and bushes, but occasionally, when hard pressed, alighting in the shrubbery. It has a beautiful song (heard but once), reminding one strikingly of that of the Vesper Sparrow, but longer and sweeter. A series of specimens were collected between December 16 and April 1, showing comparatively little wear until the latter date.

"FLORIDA" SONG SPARROW. *Melospiza melodia beata*. A rather common winter resident, last noted on March 24. As will be shown

in another connection, the name *beata* of Bangs, applied by him to a form supposed to breed in Florida, must be taken for the Song Sparrow of the region west of the Appalachian Mountains. The series from Whitfield (twelve specimens, the latest dated March 14) unquestionably belong to the present race.

SWAMP SPARROW. *Melospiza georgiana*. Like the last this is a common bird in the winter in its chosen haunts. The first was noted on November 19, and the last April 28. Examples shot during April show feather renewal going on about the head and throat. We find no winter birds with solid chestnut crowns, although the pattern of this part varies a good deal.

TOWHEE. *Pipilo erythrophthalmus erythrophthalmus*. An extremely interesting series of Towhees coming as they do from a point east of the type-locality of the supposed race *canaster* Howell (Mobile, Alabama), were taken between November 24 and April 10. Most of these are easily referable to the typical race, and probably represent winter migrants from the north, but they grade down from this type to birds that are only arbitrarily distinguishable from *alleni*.

WHITE-EYED TOWHEE. *Pipilo erythrophthalmus alleni*. This is the resident race of Towhee, and is common, associating with the other form during the winter months. The series collected, comprising twenty specimens, are not typical, at least as compared with skins from peninsular Florida, the birds being a little larger, and having more white on the tail. In fact, there is an unbroken series connecting the northern bird with *alleni* represented in the Towhees from this locality, but only a few of those here referred to *alleni* approach the measurements of *canaster* as given by Mr. Howell. This supposed form seems to have been based on intergrades between *erythrophthalmus* and *alleni*, and we do not consider that there is room for such an intermediate race. Nos. 13,096-7, May 14, are undoubtedly breeding birds, and while they are not typical *alleni*, we would refer them thereto without question. Mr. Howell has described *canaster* as having the females more grayish, less brownish above than those of *alleni*, but there is much variation in this respect even in the northern bird, although *alleni* averages grayer than the other in the female, and the smaller specimens from Whitfield agree with it in this respect. Only one of the specimens is marked as having red eyes.

Actual examination of a small series from Alabama (four of each sex, kindly loaned by the Bureau of Biological Survey) confirms in general the above impressions. The Whitfield birds are nearer *alleni*, while Alabama birds are a step nearer the northern form, the females

at least having more white on the tail. The desirability of recognizing these intermediate examples under a separate name is not obvious. The size is not especially different, considering that the specimens examined are all fully adult.

CARDINAL GROSBEEK. *Richmondia cardinalis cardinalis*. A common resident. We cannot see that the series secured bear out any of the characters assigned by Mr. Bangs to the supposed form from Louisiana (*Proc. New England Zool. Club*, IV, 1903, 5-7). It is true that they exhibit much individual variation, particularly as regards the exact shade of the red in males. No. 11,607 is the palest (pale rose doree below) and No. 12,479 is one of the darkest. Females which are washed with red below usually have some red feathers on the fore part of the crown as well.

ROSE-BREADED GROSBEEK. *Hedymeles ludovicianus*. One was noted in migration on May 15.

SCARLET TANAGER. *Piranga olivacea*. A rare transient; one was noted May 13.

SUMMER TANAGER. *Piranga rubra rubra*. A common summer resident, keeping mostly to the pines. Its arrival was recorded on March 19, but it did not become common until April. Its song lacks the roughness of that of the Scarlet Tanager, and reminds one strongly of that of the Rose-breasted Grosbeak.

PURPLE MARTIN. *Progne subis subis*. A summer resident, common locally, first seen (and secured) as early as February 18, but the bulk not arriving until a month later.

CLIFF SWALLOW. *Petrochelidon lunifrons lunifrons*. This is merely a transient visitant, noted from April 15 to 23, and not common even then.

BARN SWALLOW. *Hirundo rustica erythrogaster*. Common as a spring migrant. It was first noted on April 14, when it was found coursing over the marsh at the mouth of the Alaqua River, in company with the Bank Swallow. May 11 was the latest date of record. On May 4 we encountered Barn Swallows in immense numbers at Horse-shoe Bayou, coursing over the marsh, and feeding as long as there was sufficient light. Just at dusk there was a commotion among them; they gathered together in a rather compact flock, mounted high in the air, and sailed off to the northward. This was evidently a migration flight, but this is one of the birds which has been supposed to migrate exclusively by day.

The small series taken were shot between April 14 and 23. The color of the under parts is variable, but probably the older the bird is the more richly colored it becomes. No. 12,913 is nearly or quite as deeply colored as *H. rustica tytleri*, and in No. 12,975 the pectoral collar is virtually complete.

TREE SWALLOW. *Iridoprocne bicolor*. A small flock was seen flying southward on November 29, but otherwise this species was not observed until March 22, becoming common the following day. April 23 was the latest date of observation.

BANK SWALLOW. *Riparia riparia riparia*. Noted as a transient in the spring, arriving on April 14, and common on April 17. In every case it was found flying over the water, or over the marsh at the mouth of the Alaqua River.

ROUGH-WINGED SWALLOW. *Stelgidopteryx serripennis*. Rather common, and doubtless a summer resident here as in neighboring parts. March 14 is the recorded date of its arrival. Like the Bank Swallow, it was invariably found near the water.

CEDAR WAXWING. *Bombycilla cedrorum*. Not observed in the winter months, but quite frequent in the spring, from March 8 up to as late as May 15. It occurs in flocks, wandering through the woodland; one such flock was found that must have contained one hundred birds or more.

LOGGERHEAD SHRIKE. *Lanius ludovicianus ludovicianus*. A resident species, fairly common, and noted regularly from November to May.

RED-EYED VIREO. *Vireosylva olivacea*. No doubt this is a summer resident, having been observed as late as May 8. The first was noted and secured on March 19. The small series taken show considerable variation in size.

YELLOW-THROATED VIREO. *Lanivireo flavifrons*. One was identified on April 16. A rare transient.

BLUE-HEADED VIREO. *Lanivireo solitarius solitarius*. Only two specimens clearly belonging to this, the typical race, were taken, on December 19 and April 28 respectively, the latter being a late date. It occurs of course as a winter resident, but is rare.

MOUNTAIN SOLITARY VIREO. *Lanivireo solitarius alticola*. Six specimens of this race were taken, at dates ranging from January 1 to March 9. These have been compared with a series of breeding birds from the southern Alleghanies in the Brewster Collection, and with a few fall birds from the same region, and, allowing for different degrees

of wear, etc., they seem to agree fairly well. This race averages larger than true *solitarius*, with more gray on the back, darkening the green of the upper parts. This latter feature, however, is more noticeable in worn breeding dress than at any other time. Some of the above have smaller bills than others, but the balance of the characters they show favors their reference to *alticola*, which evidently mingles with the typical form at this season in this region.

SOUTHERN WHITE-EYED VIREO. *Vireo griseus griseus*. A common summer resident, haunting the bushy thickets and the margin of the woods. A series of nineteen specimens were collected between February 26 and May 14, and will be made the text for a few remarks. They are very uniform, and differ conspicuously from northern birds in the pallor and restriction of the greenish yellow of the sides and flanks; the green of the upper parts is duller, and the yellow frontlet and superciliaries not quite so bright. They thus agree with the description of *maynardi*, described from Key West, which is supposed to be confined to southern Florida. From this latter region we have been able to examine a good series of specimens, including ten from Key West. These were shot in March, and are therefore strictly comparable with the Whitfield series (in large part). As a series the former are perhaps a trifle paler below, the throat and breast whiter, with less of a grayish cast, but the difference is very slight, and in my judgment not sufficient to justify calling them by a different name. This determination brings the range of *maynardi* suspiciously close to the type-locality of *Tanagra grisea* Boddaert, which is "Louisiana." Through the courtesy of Mr. Edward S. Hopkins, of the Louisiana Department of Conservation, we have been able to compare our series directly with specimens from that State. A pair of birds shot April 2, and which therefore probably represent the breeding form, prove to be absolutely indistinguishable from our series from western Florida. (A breeding bird from Clinton, Louisiana, in the collection of the American Museum of Natural History, is likewise similar). Moreover, Buffon's Plate 714, figure 1 of the *Planches Enluminees*, which is the basis Boddaert's name, agrees much better with this resident race of Louisiana and Florida than with the northern form. This should suffice to fix the name, even although the northern form is known to occur in migration in Louisiana, as is proved by a pair of birds shot September 9, and which are easily referable thereto. Accordingly, it will be necessary to alter the present arrangement of the races of this species. *Vireo griseus maynardi* (Brewster) thus becomes a synonym of *Vireo griseus griseus*, and *noveboracensis* of Gmelin will again become available for the

northern bird, this time in a subspecific sense. Our measurements indicate that *griseus* averages smaller than *noveboracensis*, not larger, as said by Mr. Ridgway (in his diagnosis of *waynardi*). In view of this fact the status of the supposed form *micrus* requires re-investigation. Specimens from Texas in the collection of the American Museum of Natural History are smaller and paler than Florida examples, but neither of these characters is very well marked. Breeding birds from Summerville, South Carolina, in the same collection, agree best with the Key West series, and indicate that the range of *griseus* extends at least that far north on the Atlantic coast. The English name "Key West Vireo" is so inappropriate under the circumstances that we would suggest that it be changed to "Southern White-eyed Vireo."

BLACK AND WHITE WARBLER. *Mniotilta varia*. Rare in spring migration; noted on March 23, April 10, and April 23.

PROTHONOTARY WARBLER. *Protonotaria citrea*. In the bushes and shrubbery along the streams and about the stagnant pools this warbler was a common species. As we drifted along in our small boat we often flushed the birds close to the water's edge, the brilliant yellow of their plumage standing out against the background like a flash of gold. Although favoring these shady nooks, and usually keeping low down, one would occasionally mount to the top of a tree and give utterance to a song which resembled that of the Black and White Warbler, but was much shorter, consisting of only about four notes. The first was seen on March 23, and on April 13 a female was discovered building a nest, which was collected on April 29, at which time it held five fresh eggs. It was built in a hollow stub, about two feet directly over the water of a stream. The eggs were white, richly marked with reddish brown blotches, in the usual warbler style.

SWAINSON'S WARBLER. *Limothlypis swainsoni*. This was one of the few species we had hoped to meet in this region which actually came up to expectations. The first was noted on April 4, and during the course of the next week or ten days it became fairly common. Its favorite haunts are the dense thickets on the edge of the lowland woods, where it contrives to keep so well concealed that were it not for its characteristic song its presence would go unsuspected. It is fond also of rank fern growth, where it is equally successful in eluding observation and capture. Only once did we find it in the dry upland, among the thick scrub oaks. The birds spend most of their time on the ground among the dry leaves, walking along gracefully, like the Ovenbird, and uttering their song at frequent intervals. The song is so loud that it can be heard at a considerable distance; it reminds one some-

what of that of the Water-Thrush, but is more musical. Virtually all of the individuals secured were taken by following up the singing birds, and waiting for them to come into sight. So long as they kept on the ground while singing, as they mostly did, it was next to impossible to catch a glimpse of them, but occasionally one would mount on a low bush to perform, and once we discovered a singing male perched on a tree, twenty-five feet up, but this must have been exceptional. Towards the end of our stay it became more easy to "squeak" the birds up into view, possibly because of the onset of the breeding season, and some females were thus taken, but we were not successful in discovering any nests. Special effort was made to secure this species, and twenty specimens were collected. The color of the pileum varies in this series from buffy brown to tawny olive to raw umber, with an indication of a median frontal streak of paler; the under parts in some specimens are pure yellowish, and in others soiled yellowish.

WORM-EATING WARBLER. *Helminthos vermivorus*. One shot April 27 was the only record for this species, which must be merely a migrant here.

BACHMAN'S WARBLER. *Vermivora bachmani*. This species, which we had hoped to find at least as common as Messrs. Brewster and Chapman did on the Suwanee River, not so far to the eastward, proved to be one of the rarer kinds here. Only three specimens were secured, on March 9, 10, and 27. The locality must be out of its usual line of migration.

BLUE-WINGED WARBLER. *Vermivora pinus*. Another rare species, included in the list on the strength of a single specimen shot April 24—no doubt a transient.

ORANGE-CROWNED WARBLER. *Vermivora celata celata*. This warbler appears to be a winter resident here, as it is in peninsular Florida, but it is not a common bird. Only two specimens were actually secured, on December 19 and February 9 respectively; like other Florida examples we have seen they are dull colored. A third individual was noted on March 27.

TENNESSEE WARBLER. *Vermivora peregrina*. One shot April 15 was our sole record for this species.

PARULA WARBLER. *Compothlypis americana americana*. A common species, no doubt a summer resident, although we did not chance to find any nests. Its favorite haunts were the live oaks and other hardwood trees along the watercourses, usually keeping rather high up,

and where at times it was exceedingly numerous. A good series were collected, some of which, as for instance Nos. 12,868 and 12,870, could be referred to *pusilla* without doing violence to the facts, but taking the series as a whole it is distinguishable on an average from a series of northern birds. The earliest date represented is March 9, the latest May 13, when the species was most likely breeding. It is of course conceivable that some of the above were migrating individuals, but in view of the fact that so few transient species were detected at this locality, and that birds taken early in the season are precisely like those shot later on, we infer that they belong to one and the same form, the resident form of this region. No doubt the name *americana* may be justifiably restricted to designate this small, pale resident race, which probably does not go beyond Florida in the winter, while *pusilla* regularly visits the West Indies.

YELLOW WARBLER. *Dendroica aestiva aestiva*. Unaccountably rare here as a transient, a very few having been noted between April 17 and 25, in every case in shrubbery along the water's edge.

MYRTLE WARBLER. *Dendroica coronata*. This and the Pine Warbler were the only really abundant warblers during the winter months. The present species was noted as early as November 17, but may have been present sooner, while the last was recorded on April 27. Migrating flocks were repeatedly observed during April. The entire series collected (November 17-March 28) are in winter plumage, and only birds shot on March 27 and 28 show any signs of molt.

YELLOW-THROATED WARBLER. *Dendroica dominica dominica*. A common summer resident, found mostly in the pine lands, but which occasionally enters the gardens and hardwood timber. It was first seen on February 26, and was in full song in March and April. Its song suggests that of the Yellow Warbler in timbre, and that of the Black and White Warbler in style, but with the latter part much run together. The fine series secured were taken between February 26 and May 1, the latter date being represented by a bird in juvenal dress—which circumstance shows how it happens that the species can molt so early and start on its southward journey by July. Males vary considerably with regard to the amount of black on the pileum, some few having the whole crown almost "solid" black. The yellow loreal spot is very faintly developed in some.

PINE WARBLER. *Dendroica pinus pinus*. An abundant resident species, confined to the pine barrens. A nest was found in process of construction on March 26, far out on the end of a horizontal limb of

a pine, close by our house. Between November 17 and May 14 an unusually fine series of this species were secured, fifty-five specimens in all. This lot of skins admirably illustrates the gradual change from the winter to the breeding dress through wear, the effect of which is to bring out the colors in greater purity and then to dull them through fading as the season progresses. The streaking below is more prominent in spring specimens also. Four young in full juvenal dress are dated April 30, confirming the above observation on the early nesting of the species here.

PALM WARBLER. *Dendroica palmarum palmarum*. Specimens of this race were shot November 18, December 15 and 30, February 18, March 9 and 25, and April 11. It is thus a winter resident here, as well as in southern Florida, but is not so common as *hypochrysea*, from which it is doubtfully distinguishable in life.

YELLOW PALM WARBLER. *Dendroica palmarum hypochrysea*. Seventeen specimens were shot between November 21 and March 25. This seems to be the commoner form of the Palm Warbler here during the winter months. A female taken on the last date is the only one showing any signs of molt.

PRAIRIE WARBLER. *Dendroica discolor*. Rare in the spring; a few records from March 25 to April 23.

OVEN-BIRD. *Seiurus aurocapillus aurocapillus*. One was identified but not secured on January 21, this constituting a rather unusual winter record. A second example taken on April 30 was the only other instance of its occurrence that came under our notice.

KENTUCKY WARBLER. *Oporornis formosus*. Noted a few times between April 20 and May 2, and apparently not common, although these dates would indicate that it breeds here. It was always seen in damp, shady woods near the streams.

MARYLAND YELLOW-THROAT. *Geothlypis trichas brachidactyla*. A female shot on February 14 is referred to this race, which is a winter visitant from farther north.

FLORIDA YELLOW-THROAT. *Geothlypis trichas trichas*. This is the common and resident form of Yellow-throat in this region. A series of specimens collected between December 17 and April 25 are easily distinguishable from winter birds from the north by their deeper, richer coloration, different wing-formula, and relatively longer tails. We doubt very much if this form ever migrates to Cuba, as Messrs. Ridgway, Howell, and others seem to think, and the alleged extra-

limital specimens should be re-examined. (Cf. Todd, *Annals Carnegie Museum*, X, 1916, 261).

If it is true that this is the resident race on the coast of South Carolina, as there is every reason to believe, this region being the type-locality for the *Turdus trichas* of Linnæus, we can see no reason why the shift in the names proposed by Dr. Chapman, but unceremoniously turned down by the A. O. U. Committee, should not be accepted (cf. *Auk*, XXIV, 1907, 30-31). Aside from this proposal, we can discover absolutely no grounds for the recognition of "*brachidactyla*."

HOODED WARBLER. *Wilsonia citrina*. A common summer resident, frequenting the same kind of covert as the Prothonotary Warbler, although not confined so closely to the edge of the streams as that species. It was first noted on March 23, and by April 2 had already become common and musical.

AMERICAN PIPIT. *Anthus rubescens*. Not uncommon as a winter resident, from November 26 to February 26. Specimens taken in February are much duller than those shot in December and January, and more worn.

MOCKINGBIRD. *Mimus polyglottos polyglottos*. An abundant resident, and in bad favor with the farmers because of the damage it is said to do to grapes and other fruits. The series show much variation in the pattern and extent of the dusky markings on the outer rectrices, scarcely any two specimens being exactly alike in this respect.

CATBIRD. *Dumetella carolinensis*. Found sparingly through the winter, but not common even in the spring. A nest was found on May 9.

BROWN THRASHER. *Toxostoma rufum rufum*. This is a not uncommon bird during the winter months, but none were observed later than April 30, and it is not clear whether it breeds here or not. One seen March 27 was in full song.

CAROLINA WREN. *Thryothorus ludovicianus ludovicianus*. A rather common resident. The specimens taken are all easily referable to the typical form, some of them being extreme in their paleness.

BEWICK'S WREN. *Thryomanes bewicki bewicki*. One seen on December 17 was the only record for this species.

HOUSE WREN. *Troglodytes aedon aedon*. Common throughout the winter, from November 8 to April 17. Since it has not yet been reported from Alabama, this occurrence is worthy of remark. Seventeen specimens were secured, which are clearly referable as a series to the typical race, though a few of them tend somewhat toward *parkmani*.

SHORT-BILLED MARSH WREN. *Cistothorus stellaris*. A not uncommon winter resident, but from the nature of its haunts difficult to secure. It keeps in the thickest bushy and weedy growth along the edge of marshy ground, where it skulks and hides with ease and success. Six specimens were taken, the first on December 9, and the last on May 5 at the Horseshoe Bayou—a late date.

LONG-BILLED MARSH WREN. *Telmatodytes palustris palustris* (?). Two specimens shot March 17, the day the species was first noticed, are doubtfully referred to this form. They are whitish below, but above are almost as pale as specimens of *paludicola*, and cannot be matched by eastern specimens, even those taken much later in the season being appreciably darker. Marsh Wrens became common on March 27, but whether of this form or the next cannot be said. They were plentiful in the marsh at the mouth of the Alaqua River, but were shy and unusually difficult to secure.

MARIAN'S MARSH WREN. *Telmatodytes palustris marianae*. A pair were shot in the marsh on April 18, both in molting condition. These were examined some years ago by Dr. H. C. Oberholser, who pronounced them *thryophilus* (cf. Ridgway, *Bulletin U. S. National Museum*, No. 50, III, 753), which name is now considered a synonym of *marianae*. They are decidedly darker than the two birds taken in March, and one of them has a gray tail. No doubt they represent the breeding race of this region. The last word is yet to be said on the subspecific division of the Marsh Wrens of this genus, but our material is inadequate for a full discussion of the problem.

BROWN CREEPER. *Certhia familiaris americana*. A winter resident, observed but three times, on November 29, January 7, and March 4.

SOUTHERN WHITE-BREASTED NUTHATCH. *Sitta carolinensis carolinensis*. Resident, but far from being common. Five specimens secured are really very little different from northern birds.

BROWN-HEADED NUTHATCH. *Sitta pusilla*. A common and resident species, characteristic of the pine barrens. A set of five eggs was taken on March 2 from a nest built in a rotten post in Alaqua Bayou, some distance from the shore—a rather unusual site.

TUFTED TITMOUSE. *Baeolophus bicolor*. A common resident. Specimens taken after the middle of February were beginning to get soiled below.

CAROLINA CHICKADEE. *Penthestes carolinensis carolinensis*. Like the last a common resident, and a good series of specimens secured.

GOLDEN-CROWNED KINGLET. *Regulus satrapa satrapa*. A moderately common winter resident, noted from November 17 to February 18.

RUBY-CROWNED KINGLET. *Regulus calendula calendula*. This species is likewise a winter resident, but is much more numerous, and appears to remain later in the spring, the last date of record being April 23.

BLUE-GRAY GNATCATCHER. *Polioptila caerulea caerulea*. One was shot on November 27, but no more until February 6, and a number through the rest of February and in March, but they did not really become common until the end of the latter month, and it is evident that the bulk of the species passes farther south to spend the winter.

WOOD THRUSH. *Hylocichla mustelina*. The occasional wintering of this species here is attested by the seeing of two individuals, on December 25 and January 13, the latter of which was secured. It is not known to winter in peninsular Florida, or in fact anywhere in the United States beyond eastern Texas, so that the present record is of considerable interest, being the farthest north known. No more were noted until April 18, and none after April 30, although it probably breeds here, at least in small numbers, since eggs have been found as early as this in the region immediately to the northward.

WILSON'S THRUSH. *Hylocichla fuscescens fuscescens*. Common as a spring migrant, from May 8 to the close of our work.

HERMIT THRUSH. *Hylocichla guttata faxoni*. Rather common throughout the winter, from November 18 onward. Most of them had gone by April 1, but a single straggler was taken as late as April 28, and another was seen May 7.

ROBIN. *Turdus migratorius migratorius*.

SOUTHERN ROBIN. *Turdus migratorius achrusterus*. Both races of the Robin appear to be represented in the small series of specimens secured, the most of which, however, are more or less intermediate, in their measurements at least. Robins appeared in large numbers on December 6, and remained common until March 13.

BLUEBIRD. *Sialia sialis sialis*. A common resident species, but more numerous in winter. A nest with one egg deposited was found April 4, and a set of five was taken on April 23.

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